

Government Organization

In view of the complex nature of the problems we have considered and our study of the existing means for dealing with them, we have concluded that new administrative arrangements within the Federal Government are required to develop and maintain a national program for telecommunications.

Our consideration of the total situation has led us to look at the question of Government organization in this field on a broad basis. From that view, it is apparent that changes in the Federal structure should be made so the Government can more adequately cope with the problem of keeping the technical and policy aspects of the telecommunications field under constant review, so that technical and administrative arrangements for conserving frequencies are kept constantly up to date; so that standards for determining priorities of claims on our frequency resources are kept current. Only thus can the administrators of frequency allocation and assignment, for example, receive the policy guidance required to enable them to deal with the radio frequency spectrum most wisely in the public interest.

We have arrived at this position after reviewing the present constitution and performance of Federal agencies, formal and informal, for dealing with telecommunications policy and with frequency utilization problems. We have considered the most important gaps in these fields--in particular those deficiencies which led

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to our appointment. We are impressed both by the dynamic nature of the telecommunications art and also by the changing world circumstances which put shifting stresses on our needs for domestic and world communications. Any particular policy recommendations we might make now for frequency conservation, or for priorities in spectrum use, might well be outmoded by the technical developments or the telecommunications requirements of the next few years. A continuing agency is necessary to cope with a basically changing problem.

All agencies of the Federal Government have a greater or lesser interest in telecommunications as a service essential to the conduct of their various tasks and responsibilities. Those with most sizable and urgent interests are the Department of Defense and its components; the Department of State; the Department of Commerce--in particular, the Civil Aeronautics Administration; the Department of the Treasury--in particular, the Coast Guard; the Department of Justice--especially the Federal Bureau of Investigation; the Department of Agriculture; and the Department of the Interior. The Federal Communications Commission is centrally concerned with communications. Other specialized policy and planning agencies, such as the National Security Council and the National Security Resources Board, must also take cognizance of telecommunications policies and problems. All of these agencies, then, must from time to time deal with telecommunications issues through the policy-forming machinery which has been established to handle

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departmental and interdepartmental policy problems.

Telecommunications problems are so technical, however, that only rarely have they penetrated to the higher reaches of these policy-forming organs. Reluctance both of higher officials to consider telecommunications problems and of technical specialists to refer them to higher officials is a most prominent characteristic of this field. Consequently a small number of technical organizations--both departmental and interdepartmental--have grown up which deal with their special problems with varying degrees of success.

Of the departmental agencies, we may mention the Joint Communications-Electronics Committee of the Joint Chiefs of Staff, which considers on a consultative basis telecommunications problems of interest to more than one of the military services, and which may consider problems involving relations between the three services and other Government or private communications agencies. In the Department of State there is a Telecommunications Policy Staff in the Office of Transport and Communications, a subdivision of the office of the Assistant Secretary for Economic Affairs. There is also a small technical group serving the interests of the Assistant Secretary for Public Affairs (the Voice of America).

Two interdepartmental agencies are of chief importance: the Interdepartment Radio Advisory Committee (IRAC) and the Telecommunications Coordinating Committee (TCC). The Air Coordinating Committee has a subcommittee on communications which has done

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vital work in specifying aviation communications techniques and requirements, and coordinating them with communications resources and aviation development.

The major Federal agency dealing with telecommunications is the Federal Communications Commission, created in 1934 by the Communications Act to centralize regulatory authority over all private communications companies, wire or radio, and to provide for the formation of public policy in this area. We have devoted considerable attention to examining the origin and history of the FCC, the IRAC, and the TCC from the standpoint of their possible contribution to the solution of the policy-forming and policy-executing problems now most vital to the whole field of telecommunications.

The Problems. What are these pressing communications problems? We have found four: formulation of Government policy for international telecommunications agreements; formulation of policies and plans for conversion of telecommunications facilities from peace to war, and from war to peace; formulation of policies and plans for the soundest and most equitable administration of the radio frequency spectrum in the public interest; and formulation of policies and plans for dealing with the economic forces affecting all telecommunications activities.

The first problem was dramatized by the failure to work out a rational policy under which the Government could put the Atlantic City Telecommunications Convention into effect. The second, of little urgency when our Board was conceived, was thrown into relief

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by the Korean crisis. The third arises from the fact that our total demand for spectrum space exceeds our total supply. The fourth has been highlighted by recurring financial crises in the domestic telegraph industry, and is aggravated by economic questions developing in the field of international telecommunications. The Federal Government has become so large a customer of the private communications carriers that its policies and practices for doing business with those carriers affect their vigor and coverage to a pronounced degree.

Allocation and assignment of spectrum space has now emerged clearly as a budget problem, and not a record-keeping problem, throughout most of the spectrum. This problem is complicated by the fact that different portions of the spectrum possess differing propagation characteristics, so some bands are useful for some purposes, but not for others. Hence priorities have to be related to technical characteristics which vary also with time and with direction and distance of desired communication. Developments in the state of the art have changed essential elements of the problem in the past, and will undoubtedly do so again in the future.

These problems are closely interwoven. We failed to arrive at a rational position to implement our Atlantic City agreements because we did not have a soundly estimated view of our national telecommunications requirements; we did not have a clearly stated national telecommunications policy by which we could judge the relative merits of competing statements of requirements, and thus cut the total down to something less than the total available to

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the world in particular portions of the spectrum.

It can be argued that Atlantic City was founded on the assumption of a peaceful world, and that failure of any agreement so founded is inevitable in today's international situation. Our position, however, is that even in the absence of unmistakable world crisis, we could not have arrived at a reasonable policy for implementing this convention because we had no rational way of telling Government users where to cut their requirements, and no equitable standards to apply to private claimants when we discovered that the total of claims approximated or exceeded the world supply. We might--and did--cut down requests simply by asking claimants in turn to specify their most urgent claims, stopping when all frequencies were gone. The result, however, could not be presumed satisfactory from a national point of view. One claimant's first choice might or might not be more important than the last choice of another. The particular order of claimants would also affect the result. There would be no comparing a graded list of total claims against total resources.

Conversion of Facilities. Formulation of policies and plans for sound and equitable administration of the spectrum in the public interest is undoubtedly related to formulation of policies and plans for peace-war and war-peace communications conversion. The latter is a special case of the former, insofar as radio frequencies are involved. Since radio and wire form complementary elements of the nation's telecommunications systems, policies for radio

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frequency management must inevitably affect policies for the use of wire communications for defense or other purposes.

The state of our times--constantly recurring crises of varying intensity, with the ever-present prospect of world conflagration--makes the conversion problem a continuing element of telecommunications policy. In the past, we have resorted to such devices as the Board of War Communications (or its Defense predecessor) only in times of overt warfare. The emphasis has been on taking private facilities for war purposes. Fluctuating crises call attention to the need for consideration of telecommunications resources as a whole, and for the elaboration of plans and procedures for the utilization of these resources--whether managed directly by Government or by private agencies--in such fashion as to serve best the nation's immediate needs. This differs little if at all from the overall problem of frequency management in the national interest.

Plans and policies to deal with the economic forces affecting the communications industry bear obvious relations to the other major problems. A vigorous, healthy industry may be a vocal and persuasive claimant for frequencies, but by the same token, will be a more efficient manager of them. The adequacy and scope of the nation's private communications system affect our capabilities for assuring the nation's safety. The nation's position in international negotiations is based in significant measure on the requirements of our private carriers.

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In our study of the Federal Communications Commission, the Interdepartment Radio Advisory Committee, and the Telecommunications Coordinating Committee, we have not gone into exhaustive detail; we have examined the record and discussed with qualified observers the basic nature of these organizations, their past record and their probable adaptability to meet more adequately the exigencies of the present and future. We have been mindful of the advantages of building on existing men and organizations; we have no wish to add to the number of existing Government organizations unless the need is inescapable; we have looked for ways and means of adapting these agencies so they can more effectively carry out the tasks we think need to be done, or done better.

From this special point of view we have appraised each of these agencies, as a means of arriving at our conclusion of what should be done to strengthen Government telecommunications policy machinery.

The Federal Communications Commission

The Federal Communications Commission was created by the Communications Act of 1934 as an independent agency to regulate interstate and foreign commerce in communications by wire and radio. The ultimate public policy embodied in the Act is

"to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, [and] for the purpose of promoting safety of life and property through the use of wire and radio communication..."

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An immediate objective was to secure "a more effective execution of this policy by centralizing authority heretofore granted by law to several agencies and by granting additional authority with respect to interstate and foreign commerce in wire and radio communication..." /

/ Communications Act of 1934, as amended, Sec. 1.

The Commission has broad powers to regulate common carriers engaged in interstate or foreign communications activities, and radio broadcasters. The Commission enforces those provisions of the Act which require ships to carry specified radio equipment and comply with procedures for safety at sea. The Commission carries out the necessary inspections and investigations, and can compel actions by those it regulates to conform to the broad purposes of the Act. The Act provides sanctions and empowers the courts to enforce Commission decisions. On the other hand, the Act specifies elaborate procedural provisions, designed to afford appeals to the courts to any party who is aggrieved by a Commission decision, or whose interests are affected thereby. These provisions for due process of law, these protections against arbitrary or capricious Government action, are necessary elements of the Commission's concept and conduct.

The Communications Act was passed with the intention of centralizing in one agency the task of viewing non-Government

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communications as a whole, of developing communications policies for wire and radio on an integrated basis, and of providing for regulation of specific forms of communication with due regard to the effects of particular actions on other forms of communications. It was recognized this was a technical field in which Congress could not hope itself to carry out the quasi-legislative process of rule-making, or the administrative process of applying the standard of "public interest, convenience, and necessity" to numerous specific cases. Those provisions of the Communications Act which require the Commission to study special problems and recommend legislation to cure them explicitly recognize the intent of Congress to give the Commission special policy-forming responsibilities for technical communications matters.

As such, the Communications Commission might well have been regarded as an appropriate place to put the policy-forming functions we have in mind. #

Responsibilities of the President. The Communications Act itself, however, suggests otherwise. It divides Government power to assign spectrum space, and vests defense powers in the President alone. While the preamble to that Act recognizes the value of communications to national defense, and may include by implication the suggestion that the Commission might have a direct interest in the management of telecommunications for defense purposes, Section 606 of the Act clearly vests in the President the power to take over civilian telecommunications facilities, both wire and radio,

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for emergency and war purposes. The President need not turn to the Commission for any sort of prior consultation or advice before exercising his powers under the Act. Furthermore, the Act specifically gives the President the power to assign radio frequencies to Government stations, and specifically exempts Government stations from the licensing and other regulatory powers of the Commission when they are operating as such. The Act provides no standards to guide the President in assigning frequencies to Government stations; his determination of need is final. On the other hand, the Act places the Commission under no duty to respect the President's assignments; either the Commission or the President could start a radio war by assigning the same frequencies to potentially interfering users.

Similarly in the field of foreign relations, the preamble to the Act suggests the Commission should concern itself with foreign relations by including, as part of the Commission's broad public policy objective, regulation of foreign commerce in part with an eye to fostering a rapid and efficient world-wide wire and radio communication service. Yet it is patent that Congress could not and did not wish to give the FCC powers in the field of foreign relations which are constitutionally within the prerogative of the President.

The Communications Act was passed at a time when there was far less conflict than there is now between the requirements of the Government and the requirements of private claimants for radio

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frequencies. Technological and economic developments kept pace with valid demands for frequency assignments, in the main. Expectations for defense needs were geared to the thinking of the times. Expectations in the field of foreign relations were also far lower than those generated with the emergence of the United States as one of the major world powers.

Accommodation between the President and the Commission was a de facto political result, not a necessary legal result from the powers and structure of the Commission and legislative specification of its relationship to Congress and to the Executive. The Commission, as an independent regulatory agency, does not report to the President, nor need it consult the President in arriving at its decisions in actions before it. Members of the Commission are appointed by the President, with the advice and consent of the Senate. The Commission must come to the Bureau of the Budget in presenting its appropriations requests to Congress. The Commission is subject to Presidential power in reorganization and management matters. The President has issued Executive Orders affecting the Commission and its participation in Government activities, and the Commission has complied with them. On the other hand, the President has been chary indeed about using his budget and reorganization powers with respect to the Commission. The Commission, and in particular its Chairmen, have voluntarily taken up many policy matters with the White House, and the record shows a high degree of cooperation on matters of joint concern.

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Congressional Interest. Relationships between the Commission and the President are always conditioned by the views of Congress-- and in particular of those Senators and Representatives who take a special interest in broadcasting or other communications matters-- as to the proper role of the Commission and the degree of independence it should enjoy from the President.

Many Congressmen regard the FCC as an "arm of Congress," and take special interest in matters before the Commission which may affect communications activities in their home areas. We recognize the special interest taken by Congressmen in broadcasting and television and take account of it here because of its effect on the Commission's freedom to emphasize the various parts of its total responsibility under the Communications Act according to its own sense of importance or priority.

Hoover Commission Views. The Hoover Commission study of the FCC points to a dilemma under which the FCC long suffered: the FCC has been unable to deal effectively with the work-load before it because it has not formulated the broad policies to guide its decisions which could expedite its handling of cases; it has been unable to formulate those policies because of the pressure of current business. The Hoover experts also report that the FCC has characteristically faced its task by dealing with problems as they arise, rather than by conscious policy-making, planning, and programming for the broad future of communications regulation and

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development. Many have pointed to the tremendous burdens placed on the Commission by requirements for hearings and other time-consuming processes needed to furnish protection to the rights of claimants. The FCC has been hampered in the past in the discharge of its full regulatory responsibilities by difficulties in getting funds to make requisite inspections, special studies, and analyses of pressing regulatory problems. All these counsels have been urged as reasons why we should not recommend for the Commission new responsibilities for critical policy-making tasks, dealing with frequency utilization both by Government and by non-Government agencies, and treating of other comprehensive telecommunications issues.

We are also impressed by the fact that no Government agency or official with whom we have discussed this matter, including the Chairman and members of the FCC, has recommended that we expand the powers and staff of the FCC to deal with the policy-forming problems we think must be met.

The arguments involving excessive work-load, method of organization, and time-consuming administrative practices are persuasive but not conclusive. The Commission has already taken steps to reorganize itself in line with the Hoover group's recommendations.

The argument of excessive concentration on the problems of domestic broadcasting and television is even more persuasive. We do not think that the Commission will ever be able to free itself from the persistent pressures which force it to devote the majority of Commissioners' time and attention to these portions of the field.

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The solution of dividing the Commission into panels, already authorized by the Communications Act, is not a complete answer, as demonstrated by the views of the Hoover group's experts. Panel consideration and decision is not Commission consideration and decision. To organize a regulatory commission into panels according to specialized types of work is to divide what should be comprehensive attention to the interrelations of communications problems.

The most important argument, and in our opinion the conclusive one, is the unwisdom and impropriety of giving to an independent regulatory body executive powers which are so clearly within the President's prerogatives.

The IRAC

The Interdepartment Radio Advisory Committee was created in 1922 by letter to interested Federal agencies from the Secretary of Commerce in the interest of coordinating the uses of the frequency spectrum by the several Government agencies. Thus it antedates both the Federal Communications Commission and its predecessor, the Federal Radio Commission. These agencies were brought in on their creation, however, and IRAC has always been the nearest approach to an inclusive body in which the needs of both Government and non-Government agencies for frequency spectrum space can be considered.

IRAC membership has always included those Federal agencies most interested in the use of radio communications. Eleven are now represented: the Department of Agriculture, the Department of the Air Force, the Department of the Army, the Department of Commerce,

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the Federal Communications Commission, the Department of the Interior, the Department of Justice, the Central Intelligence Agency, the Department of the Navy, the Department of State, and the Treasury Department. The Federal Communications Commission acts as spokesman for non-Government users (that is, all users not within the Federal Government; state and local governments must come to the FCC for frequency assignments). Other Federal agencies are present or represented when matters affecting them are before the Committee.

Thus, IRAC is a group of users.

As such, it has been severely limited in its capacities as a policy-forming body. The practices and priorities it has generated have always been restricted to those by which a group of users with equal rights could get along.

IRAC's most important task through the years has been to serve as a technical forum in which users could agree on assignment of spectrum space to Federal claimants, and in which Government users could inform the Federal Communications Commission of their comments on proposed Commission allocation of frequencies to non-Government users. The Commission, as spokesman for the non-Government users, could also comment on the effect of requested assignments to Government users on present or future interests of private users.

IRAC recommends to the President lists of assignments of frequencies to Federal users, which are then promulgated in periodic Executive Orders. These orders have recognized IRAC by

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reference, in giving to it power to make interim assignments pending preparation of a new Executive Order. These orders were expected to be issued once every two or three years; nothing is fixed about this period. However, the last order appeared in 1944, and there are no plans for recommending a new one. IRAC, or in effect its sponsoring agencies, is content to continue under its interim powers. No agency seems to think it worth the risk or the trouble to formalize assignments by a new order.

Problems of IRAC. Theoretically, since the IRAC "advises" the President on the use of his power to assign frequencies to Government users under the Communications Act of 1934, an appeal can always be made to the President. Practically, such a case would come up only if an agency felt that it was denied something it ought to have. As a group of users representing co-equal agencies, IRAC has a de facto rule of unanimity in frequency assignment matters. In practice, there have been only three or four cases in which an aggrieved department did appeal to the President. The first of these, in 1928, demonstrated the lack of wisdom of trying to use an interdepartmental committee of co-equal users for generating policy, and resulted in a working rule of first-come first-served, with assignments to be made on a non-interference basis. Under formal IRAC procedures, those to whom an assignment has been made can enjoy it until they wish to give it up. Practice again, however, is something different. Back of the rule of unanimity and absence of compulsion has lain a complex process of bargaining and

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accommodation. New users or old agencies looking for new assignments during the more recent years of frequency scarcity have had to engage in a highly skilled, technical process of searching for combinations of frequency, power, time of use, direction and area of propagation, and stability of receiving and sending equipment in order to fit new uses into the existing pattern of operations.

Although there has been no compulsion by directive, all the users have been under the strong suasion of finding mutually agreeable solutions to emerging problems under pain of seeking solution at a higher but technically unqualified level. Furthermore, to the telecommunications specialist it is fundamental that the alternative to agreement is chaos.

Hence arises the technical reconnaissance and negotiating process which takes place between seeking agencies and possessor agencies whenever new assignments are sought. Requests usually come in to IRAC only after the agencies affected have come to some sort of private understanding.

We have been told that IRAC never concerns itself with "policy" and that Government users are not required to justify their requests for frequency assignments or their retention. IRAC has made some real contributions to "policy"--as for example its recommended priorities for allocating the spectrum to services which should underlie the United States Government position at the Atlantic City Telecommunications Conference of 1947. These priorities and policies were not generated, however, for IRAC to follow

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in dealing with its own business. They were valuable contributions of technical specialists intimately associated with Governmental operations, to the formulation of an international agreement.

The extent to which Government claimants must justify their requests is important to an evaluation of IRAC's role. The key to the matter is the nature of the group--a club of users, rather than an independent judging body. IRAC points to various criteria which have been decided as relevant to the justification of frequencies in its deliberations. / Whatever the relevance of the criteria,

/ Eligible reasons include: specific legislative directives; international commitments, such as treaty obligations; national defense requirements; internal security; protection of national resources; essential mobile communications; communications affecting safety of life or property; research and experimental services; and absence, inadequacy, or impracticability of establishment or use of other means of communication. Memorandum prepared for the PCPB, mimeographed, dated 2 March 1950, author unstated (presumably IRAC secretariat), p. 4. See also IRAC By-laws, 1 January 1950, Article X, "Principles Governing the Assignment and Use of Radio Frequencies."

it is inescapable that no body of users acting as judge of its own requirements can take an impartial view of the requests of its members. Security problems have complicated these issues, especially in time of war, when the fact of value to national defense would be alleged, but no supporting data have been brought forth on which the claim could have been evaluated, even if the group were of such a nature that real evaluation is possible.

In sum, we find that IRAC has done a good technical job of frequency assignment through the years, within the inherent

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limitations imposed on it by its constitution. It has taken advantage of the incentives to technical achievement and agreement inherent in its peculiar situation. It should remain as a technical body in which the day-to-day tasks of Government frequency assignment can be carried out. It is obvious, however, that a higher authority is needed for the future to solve the problems that will arise from cramping of the radio spectrum when IRAC is unable to reach unanimous agreement.

The TCC

The Telecommunications Coordinating Committee is an informal, voluntary group created in 1946 by exchange of letters between the Secretary of State and the heads of four other departments and the Federal Communications Commission. The purpose of this move was to create a body to consider telecommunications policy questions, and thus to fill for the postwar period the gap left by the demise of the Board of War Communications. The Committee is composed of one representative each of the Departments of State, Treasury, Commerce, and of the Federal Communications Commission, and three from the Department of Defense (one each from the Departments of the Army, Navy and Air Force). The Bureau of the Budget is represented by an observer. Representatives are designated by the heads of each agency; they are supposed to be of the Under Secretary or Assistant Secretary level for the non-military agencies and the chief communications officers of the armed services. Several

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efforts have been made by member departments to set up the organization more firmly by Executive Order. This has never been done. Subsequent to its formation, other departments have from time to time sought membership but have been turned off by the Committee on the ground that membership is restricted to those agencies having a "high policy" interest in telecommunications. The Committee, as a matter of practice, includes in its meetings, and in the composition of any ad hoc working committees, representatives of any agencies having a special interest in the work in hand.

At the outset it was thought this committee could formulate policies and develop plans and programs which would promote the most effective use of wire and radio facilities. The FCC, however, pointed to its statutory responsibilities for policy formulation and advice to Congress on such matters, and stated that its participation in any group such as TCC could not relieve it of these obligations or bind it in any way. The State Department reiterated its initial view that the TCC could work only by unanimity, and that there must be no intrusion on the statutory or other authorized responsibilities of any of the component agencies. TCC accordingly adopted a more modest charter in which it was agreed by the members that its mission was

"The coordination of policies of the various departments and agencies of the United States Government relating to domestic and international communications matters...; and advise on problems of an international nature including preparation

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for international telecommunications conferences. The Committee shall act in an advisory capacity only, but may take final action when specifically authorized by unanimous concurrence of all Government agencies represented by the membership....In accordance with the foregoing, the primary objective of this Committee is the formulation of a national communications policy." /

/ TCC Document No. 11, Organization/6, April 8, 1946.

The TCC is served by a small part-time secretariat furnished by the Department of State. Although it has no formally elaborated organization, it does set up ad hoc working groups.

Problems of TCC. From the evidence before us, and from discussions with participants, it appears to us that the TCC, in its present form, is inadequate to play the major role in the formulation of a national telecommunications policy. #

TCC is bound by the rule of unanimity. TCC can act when the Government departments are in agreement, or can be brought into agreement by intragovernmental persuasion and diplomacy. TCC can lay out the areas of agreement or disagreement on any issue before it, but, since its members represent agencies with user interests, the Committee cannot easily weigh and evaluate points of disagreement, resolve them, and advise the Secretary of State and through him the President of a national telecommunications policy.

TCC is hampered by the difficulties, found in other technical fields as well, of translating technical differences of opinion into policy alternatives, so they can be dealt with by the President

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or by Cabinet officers. TCC membership has suffered the decline inevitably to be expected when staff officers are unable to master this thorny task of translation. Under Secretaries and Assistant Secretaries have been replaced at meetings by Directors of Offices; Directors of Offices have been replaced by technical specialists, so TCC meetings are often conventions of IRAC representatives acting under different instructions. This situation might have valuable advantages from the standpoint of continuity of problem consideration and economy of personnel, if it were not true that technical user-oriented personnel are not suitable for the give and take which must characterize policy formation in a democracy.

When the Government, after the passage of the National Security Act of 1947, could replace the War and Navy Department representatives either by a single Department of Defense representative or by representatives of the three service departments, the choice was for the latter. This meant in practice that TCC would be weighted with representatives of military interests and functions, who besides were chiefs of the communications services of the three departments--that is, users and operators rather than high policy officials.

In most instances, this would have been salutary, since close relationships between major operational responsibility and policy responsibility are wanted. The difficulty here arose from the fact that much of telecommunications policy formation has to do with dividing scarce resources among military claimants, other

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Federal Government claimants, and non-Government claimants.

Officers heading extensive service agencies, with larger potential demands on their services than they can expect to supply, can hardly be expected to take an impartial view on such questions as the national requirement for a share of the world's frequencies.

TCC has done good work of a preparatory character toward policy formation. But TCC as presently constituted cannot complete policy formation tasks. In those many cases where unanimity does not prevail, TCC could never do so. However, TCC, better organized and staffed, could do a far better job of preparatory work so sub-Cabinet level members might go farther than now in resolution of policy differences, and in any event make possible intelligent resolution of remaining differences at the level of the Cabinet or the Presidency. We believe that reorganization and strengthening of TCC will make possible such a contribution.

The Current Problem Re-Examined

Fundamental changes in telecommunications problems require fundamental overhaul in Government machinery for formulating telecommunications policy and for administering certain telecommunications activities in the national interest.

The existing organization for frequency assignment to Government and to private users was set up at a time when--outside of the standard broadcast band--there was enough for all, and the proportion of spectrum space needed for Government purposes was small in relation to the whole. In such circumstances it was feasible

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for us to leave Government frequency administration to the executive branch, as a proper extension of executive control over the substantive functions of Government which its communications serviced; to leave assignment to private users to the Federal Communications Commission as a proper extension of its regulatory functions; and to leave interrelations between the two to good sense and a will to get along.

Government now takes approximately half the presently usable radio spectrum and was doing so before the Korean crisis. Although the Federal agencies have acquired this large portion of the spectrum under established procedures and with consideration to private interests as represented by the FCC as spokesman, these allocations were made by officials who could not weigh all demands for spectrum space, Government and private, and judge them impartially on the basis of full explanation according to a single set of standards.

We have found conflicting evidence as to the seriousness of the scarcity of frequencies in relation to demands. Some think there is no problem, and that the expected rate of technical advance and continued good will among those competing for space will meet the nation's requirements for the indefinite future. Others think the problem is critical. Without passing judgment as to precise degree of scarcity, we are convinced that pressure of present and future demands is so heavy as to force the Government to consider telecommunications resources as a whole, and to apportion them as a whole to meet the most pressing requirements of the whole nation.

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As for telecommunications policy formation, recent experience has demonstrated that the available machinery works only in the case of unanimity, and that the event of unanimity in TCC has become increasingly rare. Although there was unanimous acceptance of the fundamental concept underlying the Atlantic City Convention, unanimity disappeared when attempts were made to translate accepted policy in principle into action in practice. The United States thus was unable to present a reasonable position for implementing an agreement it had initiated. Neither the TCC nor any specially-devised machinery was able to provide that detailed position. Nor can we look with confidence to find it in the near future with existing organizations.

The Proposed Solution

We think the time has come to create a National Telecommunications Board in the Executive Office of the President. This Board should formulate and recommend to the President broad national policies in the telecommunications field; it should advise and assist the Secretary of State in the formulation of policies and positions for international telecommunications negotiations; it should carry out operational functions necessary to these central duties of policy formulation, recommendation, and advice. We describe our concept of it in detail below.

The Telecommunications Coordinating Committee should be reconstituted and formalized by Executive Order as an agency of sub-Cabinet level to coordinate and combine communications policies of

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those Federal departments and agencies possessing statutory or other formalized communications responsibilities.

The Interdepartment Radio Advisory Committee should also be formalized as a specialized agency to carry out the detailed task of assigning frequencies to Federal Government users, under policies recommended by the National Telecommunications Board and approved by the President.

The Federal Communications Commission should continue to deal with the regulation of common communications carriers and to control the use of the radio spectrum by non-Federal Government agencies according to the standards of service and of public interest, convenience, and necessity specified in the Communications Act. The Commission should continue to afford to the interested or aggrieved private party, full opportunity for public hearings and other safeguards of due process of law. The Commission's present efforts to reorganize itself as recommended by the Hoover Commission should be pressed, in order that it may as expeditiously as possible increase its availability to assist in the formulation of policy.

A National Telecommunications Board.

A National Telecommunications Board of three persons appointed by the President, with the advice and consent of the Senate, should be created by statute in the Executive Office of the President. This Board should formulate plans and policies designed to assist the President in exercising his powers and duties in the field of

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telecommunications. Specifically, the Board should:

A. Formulate and recommend to the President broad national policies in the telecommunications field. To this end, the Board should:

1. Formulate policies and plans for maximum contribution of telecommunications services to national security.

a. Formulate plans for the adaptation of non-defense telecommunications facilities to the requirements of emergency and war.

b. Perform other telecommunications functions relating to the national defense as directed by the President, or requested by the Secretary of Defense.

c. Maintain liaison as required with the Department of Defense and with all other agencies of the Federal Government concerned with national defense, with other Federal agencies, and with state and local governments and private agencies.

2. Formulate policies and plans for maximum contribution of telecommunications services to the national welfare. To this end, the Board should:

a. Formulate plans and policies designed to assure the most effective utilization of the various forms of telecommunications facilities, public and private, and to maintain a sound and healthy

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telecommunications system for both domestic and foreign communications.

- b. Formulate plans and policies for the conversion of defense telecommunications facilities no longer required for defense purposes, to the purposes of reconstruction, rehabilitation and peace.
- c. Perform such other telecommunications functions relating to the national welfare as are directed by the President.
- d. Maintain liaison with and receive recommendations from the Federal Communications Commission, and other Federal agencies concerned with the impact of telecommunications on the economic and social welfare of the nation.

3. Formulate policies and plans for allocation of the radio spectrum and for the guidance of FCC and IRAC in performing their respective functions in connection with

- a. allocation between Government and non-Government users;
- b. assignment to Government users; and
- c. provision for joint use of frequencies where feasible by different Government users, and by Government and non-Government users.

B. Advise and assist the Secretary of State in the formulation of

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Government policies and positions for international telecommunications negotiations. To this end, the Board should:

1. Formulate recommendations for the U. S. Government position on international telecommunications matters after having invited advice and recommendations from the TCC.
2. If so requested, assist the Department of State in securing personnel for delegations to international telecommunications conferences.
3. Advise and assist the Department of State in other ways on request.
4. Maintain continuous liaison with the Department of State, and maintain liaison as required with other Government agencies concerned with foreign relations matters bearing on telecommunications.

C. As preparatory and preliminary steps necessary to the discharge of its functions of policy formulation and recommendation:

1. Compile and publish from time to time comprehensive statements of U. S. Government policy relating to telecommunications.
2. Approve and promulgate engineering standards for allocations and assignments to Government users.
3. Provide for adequate initial justification and periodic rejustification and reassignment of frequencies assigned to Government users, according to current priorities.

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4. Maintain such records of U. S. frequency assignments as it deems necessary.
5. Make arrangements with the FCC or other agencies to use their facilities for monitoring and check to determine compliance with conditions attached to frequency assignments in order to reveal important aspects of world spectrum use, and for other purposes.
6. Keep abreast of research programs in those aspects of the telecommunications field which bear on radio propagation and frequency utilization, and stimulate and support research where most needed in these areas by Governmental and private agencies.
7. Conduct and stimulate economic studies pertinent to the broad objectives of the Board, particularly in order to keep the Board informed of the economic health of the telecommunications industry and the effect upon it of policies and procedures developed by the Board.
8. Advise the President on legislation dealing with telecommunications matters.

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Discussion of Organization and Procedures

Some further explanation of this proposal may be needed to make our intentions clear.

We think it advisable to proceed by statute, in accordance

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with the Reorganization Act of 1949. All of the functions and duties we have in mind are now being performed, or authorized to be performed, by existing agencies of the Federal Government. By regrouping them as responsibilities for a single agency, we think that the efficiency and equity with which the Government manages its telecommunications activities, and the promptness and inclusiveness of its formulation of telecommunications policy can be greatly improved. Frequency allocation and assignment functions can be better done because an agency of appropriate design is set up to do them. Other functions, now authorized but buried or neglected, can be better done by an agency sufficiently specialized to concentrate on them. These gains, fortunately, appear possible under a Reorganization Plan.

Statutory foundation, moreover, will give the Board the status and powers it needs, and will provide a measure of Congressional sanction for its structure, its purposes, and its relations to existing Government agencies.

The new Board should be in the Executive Office of the President because it must be at that level if it is to cope with the characteristic situation in which the various Government departments charged with telecommunications responsibilities cannot agree on a comprehensive national policy.

The President should designate the Board's Chairman, who should also serve as Chairman of the Telecommunications Coordinating

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Committee. We place great stress on the value of so relating the new Board to the existing agencies. Terms of office should be staggered and reasonably long. We understand the maximum term possible under a reorganization plan is four years. There should be no restrictions on reappointment. Members should be appointed by and with the advice and consent of the Senate, and should be removable by the President for cause. It goes without saying they should be men of eminence gained by technical achievement or public service, in or out of the telecommunications field. They should receive basic compensation at a rate not less than that of Assistant Secretaries of departments; the Chairman, who should direct the administration of the Board and its staff, might well receive more.

The Board should have latitude to determine its procedures and mode of doing business. Every effort should be made to safeguard the rights of private citizens who may be affected by decisions of the Board. Although there may be few individual citizens who would specifically come before the Board as claimants, certain types of users of frequencies, or other groups of private citizens, will undoubtedly be indirectly affected by the Board's decisions. This Board therefore should be open to receive the views of private citizens, of Government officials, and of members of Congress on those determinations which are proper to its assigned responsibilities. On the other hand, the Board should not be so hampered by procedural requirements that it cannot take a

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comprehensive unhurried view of the national policy questions on which it must make recommendations.

All departments and agencies of the Government, including the military services and the Central Intelligence Agency, should be authorized and directed to furnish to the Board whatever information the Board requires to make a full determination of the questions before it.

The Board must always be in a position to receive and consider classified matter submitted by military or other Government agencies in justification of their proposals. Only thus can it hope to make reasonable judgments based on complete facts. Obviously, the Board must be in a position to protect such confidences.

The Board should be authorized to create and utilize such panels, advisory groups, working committees, and ad hoc working parties as it requires to carry out its responsibilities. It should be empowered to utilize the personnel and services, where feasible, of existing departments and agencies of the Federal Government and of state and local governments, on a reimbursable or other mutually agreeable basis.

While the Board and its own staff should be small, and should stay out of operational matters, we recognize that it may have to take on certain operating functions necessary to the full completion of its major mission. We recommend it be flexibly constructed so it can do so if necessary.

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Our initial suggestions call for administrative support for the Telecommunications Coordinating Committee from the Department of State, and for IRAC from the Federal Communications Commission. We think it might be advantageous if ultimately the secretariats of the Board, TCC and IRAC could share common housing and could be administered jointly.

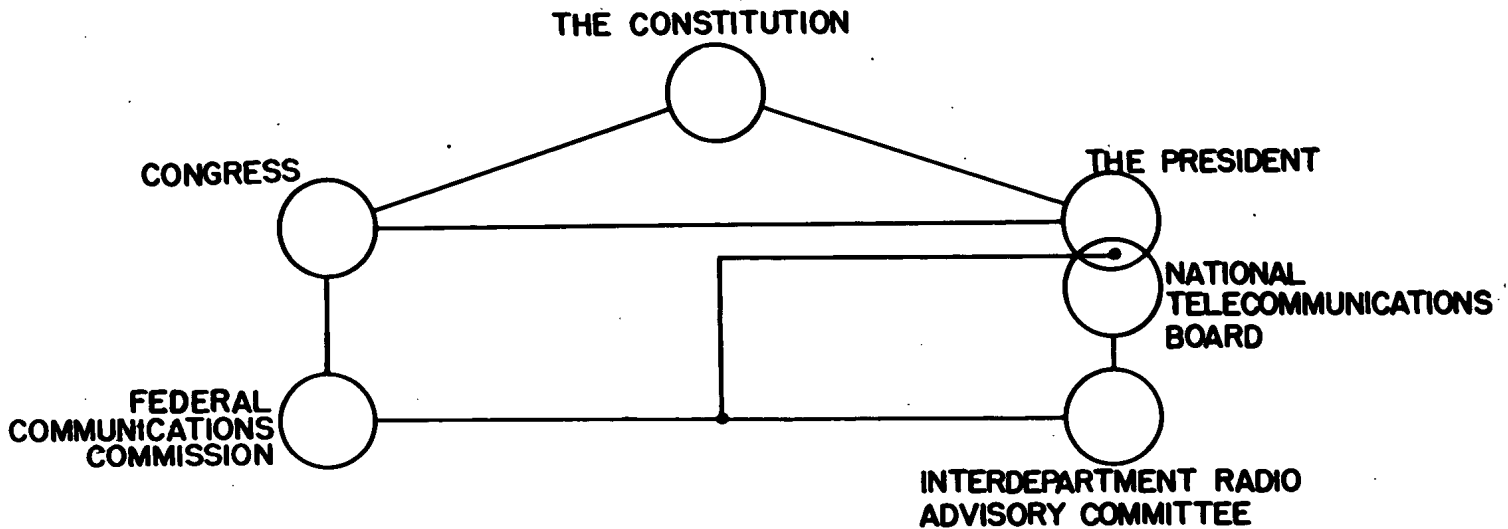
Discussion of Functions.

We wish to make the following comments on the detailed functions proposed for the Board in order to clarify them and indicate more specifically our view of the desired relationships between the Board and its functions and those of existing agencies.

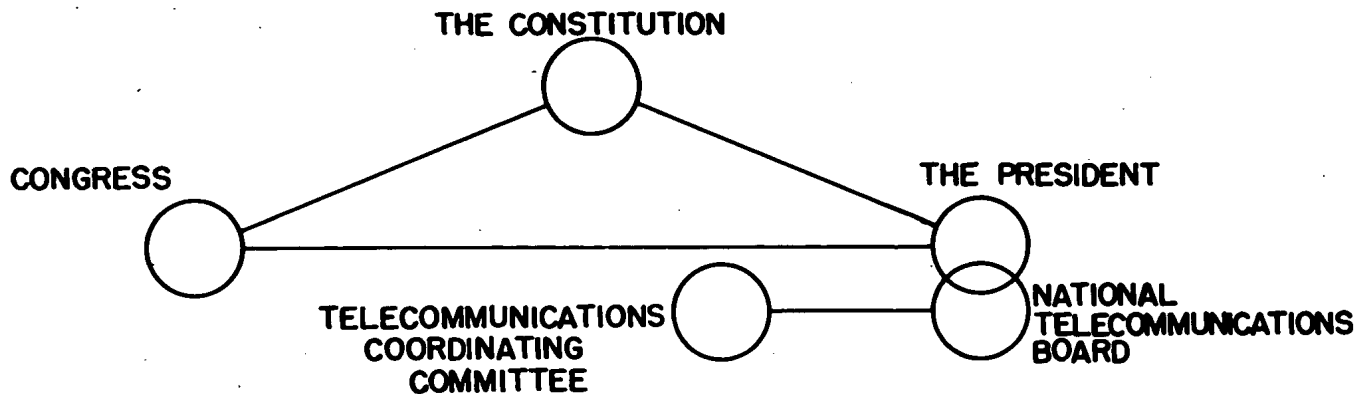
We have recommended that the Board proceed largely by policy formulation and recommendation to the President or to other appropriate officials. Many agencies have indicated concern which the words "policy formulation" raise in their minds. In our view, the process of formulation is no more than that of systematic and precise statement, made after full consultation with responsible and interested Government agencies. We have tried to make this Board an agent of the President, to advise him in the discharge of his powers and responsibilities which pertain to telecommunications. Only as an agent of the President do we think it could be capable of dealing with disagreements among the Government departments and agencies. (See chart on page 00.)

An important task for the proposed Board is the formulation of policies and plans for allocation of the spectrum between

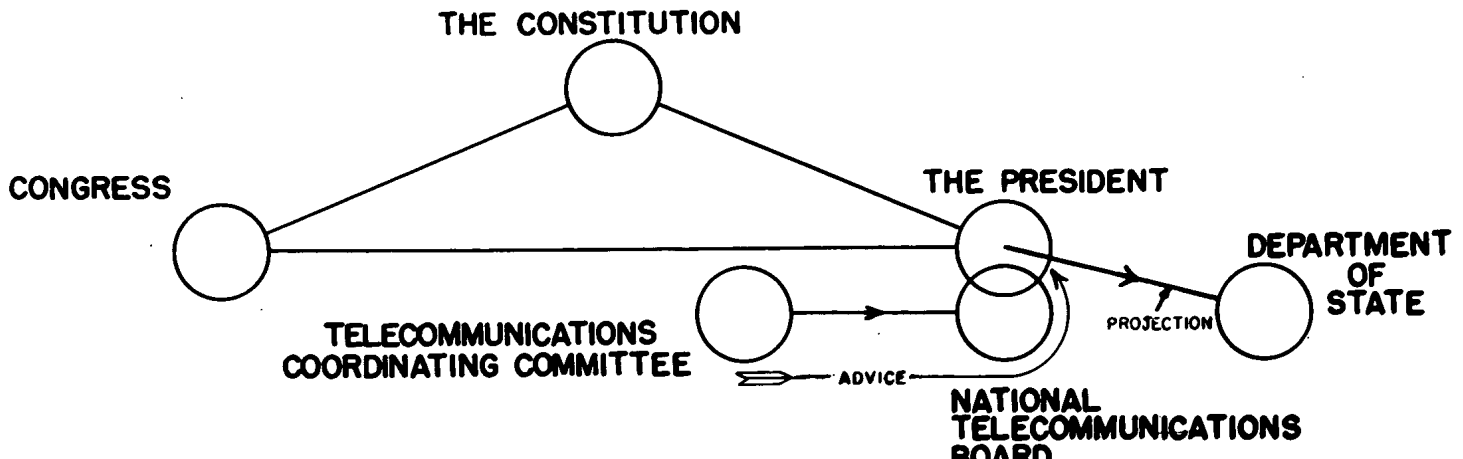
ORGANIZATION CHART FOR RADIO SPECTRUM MANAGEMENT



ORGANIZATION CHART FOR FORMULATION OF NATIONAL TELECOMMUNICATIONS POLICIES AND PLANS



FLOW OF ADVICE ON BROAD TELECOMMUNICATIONS PLANS AND POSITIONS FOR FOREIGN POLICY PROJECTION



Government and non-Government users; to Government users; and for joint use of frequencies.

NTB should emerge as the chief forum for working out a unified Government policy for the allocation of the spectrum to communications services. Control of the spectrum is peculiarly a Government responsibility; no private person can establish or claim any private right to a frequency. As a Government responsibility, it is more than a purely executive responsibility, and more than a purely legislative responsibility. Hence the value of a formalized forum in which representatives of the President and of FCC can meet to work out unified policies for the allocation of this peculiarly national resource to national ends.

Under these policies, IRAC can assign frequencies to Government users. The FCC can assign frequencies to private claimants under the standard of public interest, convenience, and necessity from spectrum space reserved for non-Federal Government users, and with full compliance with the requirements of due process of law. There should be one single agency in which these questions are decided on the basis of presentations from all interested parties. Government agencies are to be heard directly; the Federal Communications Commission should customarily speak for private parties; the National Telecommunications Board in its discretion should call in any other witnesses whose information and wisdom are pertinent to the determination of these questions of frequency allocation.

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National defense planning functions are included despite the fact that a number of existing agencies are already charged with portions of this responsibility. A continuing agency, not just a Board of War Communications existing during hostilities, is required. While the National Security Resources Board has a continuing responsibility to see that planning for war mobilization is carried out, it has not staffed itself to discharge the particular planning responsibilities in the communications field. A high level agency, dealing normally with questions of total communications policy, is in an ideal position to work with the Department of Defense or other interested agencies in carrying out this planning responsibility well in advance of the time that emergency agencies can be organized to do it.

It might appear that there is no need to set up a new organization to deal with plans and policies for maximum contribution of telecommunications services to the national welfare. Plans and policies covering services offered by agencies other than those of the Federal Government are already a direct responsibility of the Federal Communications Commission under the Communications Act. It is necessary to emphasize, however, that this existing assignment deals only with the non-Federal sector. Furthermore, the Commission has always been preoccupied with special sectors of the telecommunications field, and it is highly probable that the pressures leading to that preoccupation will continue. In addition, the broader field includes the reverse side of the

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defense-planning function: the task of seeing to it that war communications are reconverted when timely to other purposes in a consistent and orderly way. All these considerations suggest there is need for a new agency equipped to deal comprehensively with telecommunications policy.

There is also a continuing task of considering Government policies and procedures for the handling of the Government's business with private communications companies. This is not a regulatory matter appropriate for the FCC, although it has important implications for regulatory decisions. Government traffic is proportionately so large a part of private communications business that its terms and conditions can affect the health, the scope, and the serviceability of private communications companies. This task involves questions of Government economy, of efficiency and promptness of telecommunications service, of the impact of future telecommunications capabilities for defense and for economic progress; it is thus a continuing question appropriate for the Board.

In our proposal that the new Board advise and assist the Secretary of State in formulating Government policies and positions for international telecommunications negotiations, we have been mindful of the Secretary's responsibilities in the field of

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foreign policy. The Board will provide him with a means of arriving at a unified policy when interested Government and private agencies do not agree. A wise and skilled resolution of differences must be achieved somehow in arriving at a unified international position, and neither the President nor the Secretary of State should be expected to do this unaided.

If we are to have a sound telecommunications program in this country, the public and Government must be kept informed of policies and problems. Therefore, the Board should compile and publish from time to time comprehensive statements of national telecommunications policies. #

To approve and promulgate engineering standards for allocations and assignments to Government users, it is not necessary that the Board should have a large engineering staff. It should suffice for the Board to have a few qualified engineers who will review with the technicians of the Federal Communications Commission and the Department of Defense in particular, engineering standards pertinent to allocation and assignment procedures, promulgating those which will be of general significance in ensuring the most efficient use of that portion of the spectrum used by Government agencies.

It is highly important to concentrate upon adequate standards relating to efficiency and stability of equipment, minimum separation of frequency assignments, and sound circuit engineering which relates the load to the band width and number of frequencies

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necessary to do the work, if maximum use of the spectrum is to be achieved under standards of minimum harmful interference.

Provision for initial justification and periodic rejustification of assignments of frequencies to Government users is made partly in response to criticisms--frequently made by private users--that the Government user need not justify his request in the same detail as must the private claimant before the FCC. There is a seeming lack of equity here which should be cured if possible. But more important, we think, is the charge that Government users may hold an assignment as long as they think fit; there is no formal procedure for reconsideration of Government assignments at periodic intervals. Hence, there is a strong presumption that early claimants may be holding assignments which are less important for Government purposes than uses proposed by later claimants. This is only partly offset by the process of agency bargaining, in and out of IRAC, over possible ways of fitting new uses into the existing pattern. We think it advisable to institute systematic procedures for review of Government assignments as a whole, to ensure that the spectrum is most equitably assigned and efficiently utilized.

More needs to be done than is now done to ensure that comprehensive frequency assignment records are kept and that monitoring of assignments is maintained to see to it that frequency assignment and use policies are followed. We have not felt it proper, however, to suggest that the Board be given full responsibility for carrying out master record keeping and comprehensive

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monitoring functions. These tasks would require staffs too large for incorporation in the kind of a Board we have in mind.

We wish strongly to stress the need for more intensive and **comprehensive research on problems of radio propagation and frequency utilization.** In the recent past, critical decisions about use of the spectrum, including separation of stations, have had to be made in the absence of sufficient scientific data,

The Board should not itself be a research agency; indeed there is no necessity for it to contemplate such a role. The newly established National Science Foundation, whose principal concern will be the fostering of basic research, provides a fitting avenue for the Board's support of projects in this field. Much of the activity of the Research and Development Board in the Department of Defense, moreover, is concerned with fields of application closely related to communications matters.

At the beginning, the Board should try to improve the coverage of research on pressing problems by suggesting to agencies already equipped to conduct it, research on propagation in particular sets of conditions, and for particular bands of the radio spectrum. If stimulation in the form of funds is needed, the Board should encourage an existing Government agency to seek such funds and to allocate them or expend them as executive agent for the particular research envisaged. The Board could advise the Bureau of the Budget as to the urgency and soundness of requests made by

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existing agencies for research funds for telecommunications projects. The Board could also approach private foundations from which funds might come to underwrite needed studies. If these steps prove inadequate, the Board itself might approach the Bureau of the Budget for funds which it could allocate to research agencies to support research needed in the national interest, but not obtainable through existing channels.

The Board similarly should conduct and stimulate economic studies pertinent to the various phases of its mission. Information and analyses will be required, for example, for the Board's consideration of such problems as merger in the domestic telecommunications industry, consolidations in the international record communications field, and the economic impact of radio frequency reassignment on Government and non-Government users.

It should be clear from the foregoing that it is our intention that the new Board should not supplant or encroach upon the telecommunications responsibilities of existing Government agencies. We do not wish to disturb the normal responsibilities of the Department of State in the field of foreign affairs; we wish to create machinery to facilitate the formulation of policies and positions for telecommunications negotiations, and thus to fill a gap which the Department has been unable to close. With respect to the Federal Communications Commission, our desire is to make its tasks more manageable and to take full advantage of

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its technical resources. As an independent regulatory agency, the Commission bears major responsibility for assuring to private persons full consideration of their rights, interests, and claims in telecommunications matters. The courts see to it that this is done. Nothing we propose will infringe on the Commission's powers to assure such procedural protection. We think the Commission should remain in this role; because of the burden thus placed on the Commission, especially the Commissioners themselves, we have thought it prudent to supplement the Government's machinery for arriving at comprehensive telecommunications policy.

If the Board is to work harmoniously with the Telecommunications Coordinating Committee and the Interdepartment Radio Advisory Committee, these latter organizations need to be formalized and reconstituted to a certain extent. The particular changes required are discussed in the paragraphs that follow.

The Telecommunications Coordinating Committee should be established by Executive Order, given modified but specific terms of reference, authorized to establish necessary subcommittees and special working groups, and equipped with an adequate secretariat.

This Committee should remain an advisory and coordinating body. It should be a forum in which Government agencies possessing substantial responsibilities or interests in the telecommunications field can meet in an attempt to work out a coordinated policy in telecommunications matters arising out of those responsibilities.

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In case of agreement, each agency affected can take administrative action within its own established powers to put agreed decisions into effect. In case of disagreement, the matter involved can be referred to the National Telecommunications Board for consideration of the reasons for disagreement and for evaluation of the probable consequences for the nation of following alternative courses of action. Thus in effect the Committee would be a means for taking the first important steps toward the formulation of a comprehensive telecommunications policy; it would uncover areas of agreement and disagreement, permit action in case of the former, and point up policy choices in case of the latter.

It is recommended that the level of membership be determined by the appointments of the heads of those agencies to be represented on TCC. The present membership is supposed to be of the Under or Assistant Secretary level, but it is well known that these officials rarely attend. One reason for this is the fact that rarely if ever have problems been well enough prepared so persons of this level can deal with them expeditiously. Technical issues have not been well enough translated into policy choices. TCC has failed as a top policy organization because of its lack of substructure.

Level of membership should be left flexible, and agency representatives should be as high as necessary to deal with the particular policy issues under consideration. The Committee needs a competent and energetic Executive Secretary, and the power to

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create whatever working committees it requires to deal with special fields or non-recurring problems. With such resources, the Committee should be able to solve many interagency problems at the technical working level, and to reserve for policy officials the consideration of policy choices which could not or should not be resolved by technicians.

The TCC as such should not sponsor Government-industry conferences. The Telecommunications Policy Staff in the Department of State should continue to perform this task insofar as preparation of positions for international conferences is concerned. The Federal Communications Commission should continue to carry the main load of industry relationships. Other Government departments should continue or increase their efforts, where appropriate, to base their particular planning and operating responsibilities on sound industry relationships.

It is neither appropriate nor desirable to try to put the FCC in a position to tell executive agencies what are the most important uses of the radio spectrum. Nor would it be proper for executive agencies to decide for the Commission how to carry out its regulatory and policy responsibilities under the law. We know of no neat solution to this governmental dilemma. We see no reason to reorganize the regulation of private communications, placing it under the President. We think we can safely depend on a continuation of the good sense and accommodation which have marked legislative-executive relations in this field in the past. However, it might

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be well to clarify the precedence of the President's legal powers to assign frequencies to Government users, over those of the Commission to assign to private users. This should obtain only in those cases where, for reasons of national defense or other comparable cases of national interest, the President finds that an assignment to a Government agency is in the public interest. While there has been no case of conflict under the present inconclusive wording of the Communications Act, it might be prudent to recognize existing practical procedures and assign precedence in accordance with them.

Frequency assignment priorities have been generated in IRAC by the stream of day-to-day decisions. We think that this process should be replaced by conscious policy consideration at the appropriate policy level.

As suggested above, the top responsibility for systematizing and recommending frequency assignment policies should rest with the National Telecommunications Board; the Telecommunications Coordinating Committee should serve as the agency in which spokesmen for Government agencies meet to lay out existing Government agency views. If TCC is to do this job completely, it must include within its membership or afford rights of representation to all Federal agencies with substantial interests in telecommunications. In the past, the TCC has been composed of eight agencies. Other important Federal users of telecommunications have been denied membership.

The solution to this problem of membership is, first, to reconstitute TCC with formal membership from the Department of State,

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the Treasury Department, the Department of Defense, the Department of the Army, the Department of the Navy, the Department of the Air Force, the Department of Justice, the Department of the Interior, the Department of Agriculture, the Department of Commerce, the Federal Communications Commission, the Central Intelligence Agency, and National Telecommunications Board, and second, to require in TCC's charter that any other Federal agency must be invited to sit with TCC and discuss and vote on any telecommunications matter in which that agency has a substantial interest.

A Reconstituted Interdepartment Radio Advisory Committee

The Interdepartment Radio Advisory Committee should also be reconstituted by Executive Order as a specialized working body to assign frequencies to Government users under policies promulgated by the President. IRAC recommendations for assignments of frequencies by Executive Order should be transmitted to the President through the National Telecommunications Board, and IRAC should keep that Board informed as to interim assignments. IRAC should take on the new task of periodic review of assignments to Government agencies, and should hear in the first instance justifications of agency requests to retain assignments already made. These tasks are considerably larger than those IRAC now carries; representatives of agencies composing IRAC may have to devote most or all of their time to IRAC business. The National Telecommunications Board should spot-check IRAC assignments to determine compliance with Presidential policy. IRAC should be kept flexible to participate as

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technical advisor both to the NTB and to the TCC in the formulation of Government telecommunications policies and positions.

IRAC's membership should include as a matter of course every Federal agency which is a substantial user and operator of radio communications.

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Appended are draft reorganization plan to create the National Telecommunications Board, and draft executive orders to formalize the Telecommunications Coordinating Committee and the Interdepartment Radio Advisory Committee.

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